

REMARKS

The Office Action of May 8, 2006 has been reviewed and the comments therein were carefully considered. Claims 1, 5, 8, 9 and 12-15 have been amended, claims 3, 4 and 23-35 have been cancelled and claims 16-22 have been withdrawn.

Interview

The Applicant would like to thank the Examiner for participating in the helpful interview of May 31, 2006. During the interview, the Applicant and Examiner discussed the outstanding Office Action, the prior art and possible claim amendments that would expedite the prosecution of the present application.

Rejections Under 35 USC §112

Claims 4, 9, 14, 15 and 27 stand rejected under 35 USC 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claims 9, 14 and 15 have been amended to address antecedent basis issues. Claims 4 and 27 have been canceled and render their rejection moot. The Applicant believes that the equation recited in claims 4 and 27 is definite and reserves the right to prosecute claims that include the equation in one or more continuation applications.

On page 3, with respect to claims 14 and 15, the Office Action also indicates “executing a transaction having some variant of the number of contracts identified in (i) would cause excessive risk, which is illogical.” The Applicant respectfully disagrees. Claims 14 and 15 both include specific limits on the number of contracts that may be involved in a transaction. In

particular, after “(i) identifying the lowest number of the contracts that will cause the order risk data to be exceeded” claim 14 includes the feature of “(ii) executing a transaction that includes the number of contracts identified in (i)” and claim 15 includes the feature of “(ii) executing a transaction that includes one less than the number of contracts identified in (i).” Reconsideration of the rejection of claims 9, 14 and 15 is requested.

Rejections Under 35 USC §103

Claims 1-3, 5, 9, 12-13, 23-24, 25-27, 28-29, 31 and 33-35 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Lundberg, et al., U.S. Publication No. 2003/0097328.

Claim 1 is the only elected independent claim that remains pending. Claim 1 has been amended to include the features of “executing at a match system a transaction based on an order for **a derivative product that has a variable defined order price**” and “wherein the variable defined order price of the derivative product is a function of an original order price, an updated price of an underlying product and at least one price determination variable value based on a predetermined formula received at the match system.” As described in the present application, the use of orders for derivative products that have variable defined order prices results in a reduction of bandwidth consumed by traders repeatedly changing, canceling and replacing orders. Figure 2 shows a match system that includes a price calculation module. Conventional match systems used by exchanges do not include price calculation modules because orders are received with static prices. As indicated in paragraph 36 of the present application:

A price calculation module 220 calculates order prices based on price determination variables provided as part of variable defined derivative product orders. Price calculation module 220 may also calculate order prices based on formulas received from traders. For example, derivative product order 208 may

include a formula that is a function of an underlying contract, delta and gamma. Price calculation module 220 may be configured to calculate an order price every time the price of the underlying contract changes.

As mentioned in the interview of May 31, 2006, one advantage of such a system is that new order prices may be rapidly calculated at an exchange so that traders do not suffer from the time delay associated with sending a market data message to a trader, the trader using a model to calculate a new price and then formatting and sending a new order to an exchange. The delay associated with conventional approaches may cause a trader to miss opportunities that may be taken advantage of by traders who use “an order for a derivative product that has a variable defined order price,” as claimed. For example, an order that has a variable defined order price may be matched before a trader using a conventional approach has an opportunity to submit an order having the same price.

In contrast to what is claimed in claim 1, Lundberg et al. discloses a system that aims to reduce execution risks by using fixed price virtual instruments described as hedged derivative instruments. The Applicant respectfully submits that Lundberg et al. never teaches or suggests using “an order for a derivative product that has a variable defined order price.” In fact, the following sections of Lundberg et al. describe using a fixed order price and specifically teach away from calculating order prices at a match system:

[0013] It is an object of the present invention to provide a method and a system wherein the trading of hedged derivative orders can be executed using very little processing power. (emphasis added)

[0015] These objects and others are obtained in a system and a method wherein both the parts of the trade are guaranteed at a price known by the parties

being parts in the trade. This is achieved by creating a separate virtual instrument used in the matching in the automated exchange system. The virtual instruments created in this way can be referred to as hedged derivative instruments. (emphasis added)

[0040] **The price of the virtual hedged derivative instrument will preferably be displayed in absolute fashion by the system.** For example if the leg is traded at 23 the trade will be executed at the price 23. The reference instrument price will preferably be displayed at the time of the trade. (emphasis added)

[0044] Since the actual trade is only performed for the virtual derivative contract itself, the matching process as described herein is very efficient. Thus, in the matching process only the virtual derivative instrument itself is matched. Hence, **no prices for derived contracts need to be calculated and no complex delta value calculations need to be performed by the processor of the matching unit.** Instead, the reference instrument associated to the trade is traded at a later stage in the deal capture, i.e. after the matching but before the trade is completed and subject to clearing. (emphasis added)

[0045] If the reference instrument was to be matched simultaneously in the matching process this would significantly reduce the performance of the matching processing, since the processor used in the matching would have to make heavy calculations related to each trade. **Also, in an electronic trading system the matching process is usually one of the bottlenecks with respect to performance.** (emphasis added)

For at least these reasons, the Applicant respectfully submits that claim 1 is in condition for allowance. Claims 2, 5, 9 and 12-13 each ultimately depends from claim 1 and is allowable

for at least the same reasons as claim 1. Claims 3, 23-24, 25-27, 28-29, 31 and 33-35 have been canceled and render their rejection moot.

Claims 6, 8 and 30 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Lundberg, et al. in view of Applicant's Admission of Prior Art.

Claims 6 and 8 each ultimately depends from claim 1 and is allowable for at least the same reasons as claim 1. Claim 30 has been canceled and renders the rejection of claim 30 moot.

Claims 7, 10-11 and 32 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Lundberg, et al. in view of Dictionary of Finance and Investment Terms.


Claims 7, 10 and 11 each ultimately depends from claim 1 and is allowable for at least the same reasons as claim 1. Claim 32 has been canceled and renders the rejection of claim 32 moot.

CONCLUSION

Applicant therefore respectfully requests reconsideration of the pending claims and a finding of their allowability. A notice to this effect is respectfully requested. Please feel free to contact the undersigned should any questions arise with respect to this case that may be addressed by telephone.

The Commissioner is authorized to charge any fee or credit any overpayment of fee Deposit Account No. 19-0733.

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Respectfully submitted,
By: 
Charles L. Miller
Registration No. 43,805
BANNER & WITCOFF, LTD.
10 South Wacker Drive, #3000
Chicago, IL 60606
Telephone: 312-463-5000
Facsimile: 312-463-5001